

Atty. Dkt. No. 034536-0689

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Gregory PLOWMAN et al.
Title: ANTIBODIES AGAINST PAK5
Appl. No.: 10/725,121
Filing Date: 12/02/2003
Examiner: Unassigned
Art Unit: 1652

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Mail Stop PATENT APPLICATION
Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

Sir:

Applicants submit herewith on Form PTO/SB/08 a listing of the documents cited by or submitted to the U.S. PTO in parent application Serial No. 09/688,188, filed 10/16/2000. As provided in 37 CFR §1.98(d), copies of the documents are not being provided since they were previously submitted to the United States Patent & Trademark Office in the above-identified parent application.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.



TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the filing date of the application.

RELEVANCE OF EACH DOCUMENT

The relevance of the listed documents is explained in the parent application.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

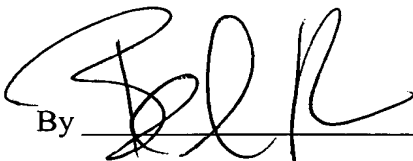
Date 2/13/04

FOLEY & LARDNER

Customer Number: 22428

Telephone: (202) 672-5475

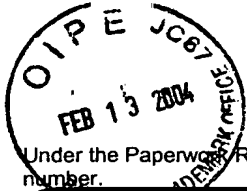
Facsimile: (202) 672-5399

By 

Beth A. Burrous

Attorney for Applicants

Registration No. 35,087



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 (use as many sheets as necessary)			Complete if Known		
			Application Number	10/725,121	
Sheet	1	of	15	Filing Date	12/02/2003
				First Named Inventor	Gregory Plowman
				Group Art Unit	1652
				Examiner Name	Unassigned
				Attorney Docket Number	034536-0689

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	4,343,940		Kreighbaum	08/10/1982	
	A2	4,376,110		David et al.	03/08/1983	
	A3	4,447,608		Jones	05/08/1984	
	A4	4,757,072		Kabbe	07/12/1988	
	A5	4,945,050		Sanford	07/31/1990	
	A6	5,217,999		Levitzki	06/08/1993	
	A7	5,302,606		Spada	04/12/1994	
	A8	5,316,553		Kaul	05/31/1994	
	A9	5,330,992		Eissenstat	07/19/1994	
	A10	6,013,500		Minden	01/2000	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	A11	WO	91/15495		Dow	10/17/1991		
	A12	EP	0 520 722	A1	Barker	06/22/1992		
	A13	PCT	92/21660		Dow	12/10/1992		
	A14	PCT	92/20642		Spada	11/26/1992		
	A15	PCT	93/09236		Schwartz	05/13/1993		
	A16	EPO	0 562 734	A1	Pegg	09/29/1993		
	A17	EPO	0 566 226	A1	Barker	10/20/1993		
	A18	WO	94/03427		Dobrusin	02/17/1994		
	A19	WO	94/14808		Buzetti	07/07/1994		
	A20	WO	96/22976		Buzzetti	08/01/1996		
	A21	WO	97 42212			11/13/1997		
	A22	WO	99 15635			04/01/1999		
	A23	WO	99 32637			07/01/1999		
	A24	WO	99 07854			02/18/1999		
	A25	WO	99 02699			01/21/1999		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A26	Abe et al., "Molecular Characterization of a Novel Metabotropic Glutamate Receptor mGluR5 Coupled to Inositol Phosphate/Ca ²⁺ Signal," J. Biol. Chem. 267(19):13361-13368 (1992)	

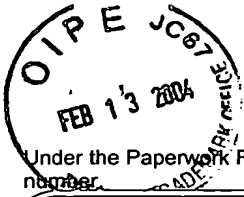
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/725,121
Date Submitted: February 13, 2004		Filing Date	12/02/2003
(use as many sheets as necessary)		First Named Inventor	Gregory Plowman
		Group Art Unit	1652
		Examiner Name	Unassigned
		Attorney Docket Number	034536-0689
Sheet	2	of	15

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A27	ABO et al., "PAK4, A Novel Effector For Cdc42Hs, Is Implicated In The Reorganization Of The Actin Cytoskeleton And In The Formation Of Filopodia", The EMBP Journal, Vol. 17, No. 22, Pages 6527-6540, 16 November 1998	
	A28	Allen et al., "Modulation of CD4 by suramin," <u>Clin. Exp. Immunol.</u> 91:141-146 (1991)	
	A29	Allen et al., "PAK3 Mutation in Nonsyndromic X-linked Mental Retardation," <u>Nat. Genet.</u> 20:25-30 (1998)	
	A30	Altschul et al., "Gapped BLAST and PSI-BLAST: A New Generation of Protein Database Search Programs," <u>Nucleic Acids Research</u> 25:3389-3402 (1997)	
	A31	Altschul et al., "Basic Local Alignment Search Tool," <u>J. Mol. Biol.</u> 215:403-410 (1990)	
	A32	Anafi et al., "SH2/SH3 Adaptor Proteins Can Link Tyrosine Kinases to a Ste20-Related Protein Kinase, HPK1*," <u>J. Biol. Chem.</u> 272:27804-27811 (1997)	
	A33	Anafi et al., "Tyrphostin-Induced Inhibition of p210 ^{bcr-abl} Tyrosine Kinase Activity Induces K562 to Differentiate," <u>Blood</u> 82:3524-3529 (1993)	
	A34	Andrews et al. (American Veterinary Medicine Association Panel on Euthanasia), "1993 Report of the AVMA Panel on Euthanasia," <u>J. American Veterinary Medicine Association</u> 202(2):229-249 (1993)	
	A35	Bagrodia et al., "Identification of a Mouse p21Cdc42/Rac Activated Kinase," <u>J. Biol. Chem.</u> 270:22731-22737 (1995)	
	A36	Baker et al., "Induction of acetylcholine receptor clustering by native polystyrene beads," <u>Journal of Cell Science</u> 102:543-555 (1992)	
	A37	Barker et al., "In vitro activity of non-glutamate containing quinazoline-based thymidylate synthase inhibitors," <u>Proceedings of the American Association for Cancer Research</u> 32:327 at abstract no. 1939 (1991)	
	A38	Bayer et al., "The Avidin-Biotin Complex in Affinity Cytochemistry," <u>Methods in Enzymology</u> 62:308-319 (1979)	
	A39	Benoist and Chambon, "In vivo sequence requirements of the SV40 early promoter region," <u>Nature</u> 290:304-310 (1981)	
	A40	Berger and Wahl, "Screening Colonies or Plaques with Radioactive Nucleic Acid Probes," <u>Meth. Enzym.</u> 152:421 (1987)	

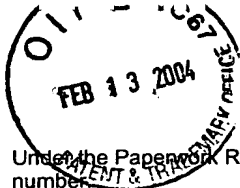
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/725,121
		Filing Date	12/02/2003
		First Named Inventor	Gregory Plowman
		Group Art Unit	1652
		Examiner Name	Unassigned
Sheet	3	of	15
		Attorney Docket Number	034536-0689

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A41	Bertino, "Toward Improved Selectivity in Cancer Chemotherapy: The Richard and Hinda Rosenthal Foundation Award Lecture," <u>Cancer Research</u> 39:293-304 (1979)	
	A42	Bilder et al., "Tyrphostins inhibit PDGF-induced DNA synthesis and associated early events in smooth muscle cells," <u>Am. J. Physiol.</u> 260(Cell Physiol.29):C721-C730 (1991)	
	A43	Bollon and Stauver, "DNA Transformation Efficiency of Various Bacterial and Yeast Host-Vector Systems," <u>Journal of Clinical Hematology and Oncology</u> 10(2&3):39-48 (1980)	
	A44	Botstein et al., "Making Mutations in vitro and Putting Them Back into Yeast," <u>Miami Winter Symposia - From Gene to Protein: Translation into Biotechnology</u> , edited by Ahmad et al., Academic Press, 19:265-274 (1982)	
	A45	Brinster et al., "Factors Affecting the Efficiency of Introducing Foreign DNA into Mice by Microinjecting Eggs," <u>Proc. Natl. Acad. Sci. USA</u> 82:4438-4442 (1985)	
	A46	Broach, "The Yeast Plasmid 2 μ Circle," <u>Cell</u> 28:203-204 (1982)	
	A47	Broach, "The Yeast Plasmid 2 μ Circle," in <u>The Molecular Biology of the Yeast Saccharomyces: Life Cycle and Inheritance</u> , Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, pp. 445-470 (1981)	
	A48	Brown et al., "Human Ste20 Homologue hPAK1 Links GTPases to the JNK MAP Kinase Pathway," <u>Current Biol.</u> 6:598-605 (1996)	
	A49	Brunton et al., "Anti-tumour activity of novel tryphostins in breast cancer cells," <u>Proceedings of the American Association for Cancer Research</u> 33:558 at abstract no. 3335 (1992)	
	A50	Bryckaert et al., "Inhibition of Platelet-Derived Growth Factor-Induced Mitogenesis and Tyrosine Kinase Activity in Cultured Bone Marrow Fibroblasts by Tyrphostins," <u>Exp. Cell Research</u> 199:255-261 (1992)	
	A51	Buccione et al., "The Acceleration of Anterograde Membrane Traffic is an Immediate Event Following the Activation of Multiple Plasmms Membrane Receptors," <u>Mol. Bio. Cell</u> 6:291 (1995)	
	A52	Bucher et al., "A Flexible Motif Search Technique Based On Generalized Profiles", Computers And Chemistry, Gb, Pergamon Press, Oxford, Vol. 20, No. 1, Pages 3-23, 1996	
	A53	Bullock and Petrusz (eds.), " <u>Techniques in Immunocytochemistry</u> ," Academic Press, Orlando, FL: Vol. 1 (1982), Vol. 2 (1983), Vol. 3 (1985) (TABLE OF CONTENTS ONLY)	
	A54	Burbelo et al., "A Conserved Binding Motif Defines Numerous Candidate Target Proteins for Both Cdc42 and Rac GTPases," <u>J. Biol. Chem.</u> 270:29071-290740 (1995)	

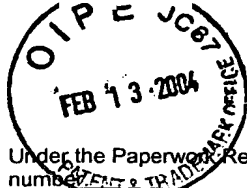
Examiner Signature		Date Considered	
---------------------------	--	------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/725,121
		Filing Date	12/02/2003
		First Named Inventor	Gregory Plowman
		Group Art Unit	1652
		Examiner Name	Unassigned
Sheet	4	of	15
		Attorney Docket Number	034536-0689

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A55	Burke et al., "Arylamides of Hydroxylated Isoquinolines as Protein-Tyrosine Kinase Inhibitors," <u>Bioorganic & Medical Chemistry Letters</u> 2(12):1771-1774 (1992)	
	A56	Burke et al., "Bicyclic Compounds as Ring-Constrained Inhibitors of Protein-Tyrosine Kinase p56 ^{lck} ," <u>Journal of Medicinal Chemistry</u> 36(4):425-432 (1993)	
	A57	Campbell, <u>Monoclonal Antibody Technology: Laboratory Techniques in Biochemistry and Molecular Biology</u> , Volume 13, Elsevier Science Publishers, Amsterdam, The Netherlands (1984) (TABLE OF CONTENTS ONLY)	
	A58	Capecchi, "Altering the Genome by Homologous Recombination," <u>Science</u> 244:1288-1292 (1989)	
	A59	Capecchi, "High Efficiency Transformation by Direct Microinjection of DNA into Cultured Mammalian Cells," <u>Cell</u> 22:479-488 (1980)	
	A60	Cenatiempo, "Prokaryotic gene expression in vitro: transcription-translation coupled systems," <u>Biochimie</u> 68:505-515 (1986)	
	A61	Chard, <u>An Introduction to Radioimmunoassay and Related Techniques</u> , Elsevier Science Publishers, Amsterdam, The Netherlands (1986) (TABLE OF CONTENTS ONLY)	
	A62	Chater et al., "Streptomyces ØC31-Like Phages: Cloning Vectors, Genome Changes and Host Range," in <u>Sixth International Symposium on Actinomycetes Biology</u> , edited by Szabe et al., Akademiai Kiado, Budapest, Hungary, pp. 45-52 (1986)	
	A63	Chen and Okayama, "High-Efficiency Transformation of Mammalian Cells by Plasmid DNA," <u>Molecular and Cellular Biology</u> 7(8):2745-2752 (1987)	
	A64	Chomczynski and Sacchi, "Single-Step Method of RNA Isolation by Acid Guanidinium Thiocyanate-Phenol-Chloroform Extraction," <u>Analytical Biochemistry</u> 162:156-159 (1987)	
	A65	Chu et al., "Electroporation for the efficient transfection of mammalian cells with DNA," <u>Nucleic Acids Research</u> 15:1311-1326 (1987)	
	A66	Cullen, "HIV-1: Is Nef a PAK Animal?" <u>Curr. Biol.</u> 6:1557-1559 (1996)	
	A67	Curiel et al., "Gene Transfer to Respiratory Epithelial Cells via the Receptor-mediated Endocytosis Pathway," <u>Am. J. Respir. Cell. Mol. Biol.</u> 6:247-252 (1992)	
	A68	Curtin et al., "Inhibition of the growth of human hepatocellular carcinoma in vitro and in athymic mice by a quinazoline inhibitor of thymidylate synthase, CB3717," <u>Br. J. Cancer</u> 53:361-368 (1986)	

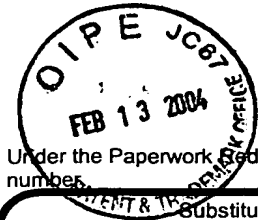
Examiner Signature		Date Considered	
---------------------------	--	------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 (use as many sheets as necessary)		Complete if Known	
		Application Number	10/725,121
		Filing Date	12/02/2003
		First Named Inventor	Gregory Plowman
		Group Art Unit	1652
		Examiner Name	Unassigned
Sheet	5	of	15
		Attorney Docket Number	034536-0689

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A69	Daniels et al., "Membrane Targeting of p21-Activated Kinase 1 (PAK1) Induces Neurite Outgrowth from PC12 Cells," <u>EMBO J.</u> 17:754-764 (1998)	
	A70	Database EMBL [Online], ID: AA576724, NCI-CGAP: "...Homo Sapiens cDNA Clone IMAGE:1074607", 11 September 1997	
	A71	Database EMBL [Online], ID: AA634299, Hillier et al., "...Homo Sapiens cDNA Clone 743770 3' ", 31 October 1997	
	A72	Database EMBL [Online], ID: AA766905, NCI-CGAP: "...Homo Sapiens cDNA Clone Image:1301771 Similar To TR:Q42341 Q42341 Serine-Threonine Protein Kinase...", 30 January 1998	
	A73	Database EMBL [Online], ID: AA865818, NCI-CGAP: "...Homo Sapiens cDNA Clone IMAGE:1456752 3' Similar To TR:P97820 P97820NIK...", 16 March 1998	
	A74	Database EMBL [Online], ID: AA885355, NCI-CGAP: "...Homo Sapiens cDNA Clone IMAGE:1460315 3' Similar To WP:T17E9.1 CE01405", 30 March 1998	
	A75	Database EMBL [Online], ID: AB011123, Ohara et al., "Homo Sapiens mRNA For KIAA0551 Protein, Partial CDs", 10 April 1998	
	A76	Database EMBL [Online], ID: AB015718, Kuramochi et al., "Homo Sapiens LOK mRNA For Protein Kinase, Complete CDs", 14 December 1998	
	A77	Database EMBL [Online], ID: AF017635, Baytel et al., "Homo Sapiens DCHT mRNA, Complete CDs", 23 September 1997	
	A78	Database EMBL [Online], ID: AF099989, Johnston et al., "SPAK: A Novel Ste-20 Related Kinase Expressed In The Pancreas", 11 November 1998	
	A79	Database EMBL [Online], ID: HS1254308, , NCI-CGAP: "...Homo Sapiens cDNA Clone IMAGE:814858 5' Similar To WP:T19A5.2 CE07510 Serine. Threonine Kinase", 16 June 1997	
	A80	Database EMBL [Online], ID: HS1254577, Hillier et al., "...Homo Sapiens cDNA Clone 796310 5' Similar To WP:ZC504.4 CE02384 Serine/Threonine Protein Kinase", 13 June 1997	
	A81	Database EMBL [Online], ID: HS1259479, NCI-CGAP: "...Homo Sapiens cDNA Clone IMAGE:814858 3' Similar To TR:G881958 G881958 MESS1", 20 June 1997	
	A82	Database EMBL [Online], ID: HS130B11B, Fujiwara et al., "Human Fetal Brain cDNA 5' -end GEN-130B11", 25 August 1995	

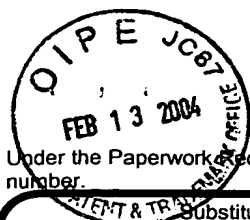
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 (use as many sheets as necessary)		Complete if Known	
		Application Number	10/725,121
Sheet	6	Filing Date	12/02/2003
	of	First Named Inventor	Gregory Plowman
	15	Group Art Unit	1652
		Examiner Name	Unassigned
		Attorney Docket Number	034536-0689

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A83	Database EMBL [Online], ID: HS571200, Hillier et al., "yr32h11.rl Homo Sapiens cDNA Clone 207045 5' ", 15 September 1995	
	A84	Database EMBL [Online], ID: MM1266197, Marra et al., "...Mus Musculus cDNA Clone 805425 5' Similar To WP:T17E9.1 CE01405", 22 June 1997	
	A85	Database EMBL [Online], ID: MMAA20708, Marra et al., "mp54a01.rl Soares 2NbMT Mus Musculus cDNA Clone 573000 5' ", 21 November 1996	
	A86	Diener et al., "Activation Of The c-Jun N-terminal Kinase Pathway By A Novel Protein Kinase Related To Human Germinal Center Kinase", Proc. Natl. Acad. Sci. USA, Vol 94, Pages 9687-9692, September 1997	
	A87	Dolle et al., "5,7-Dimethoxy-3-(4-pyridinyl)quinoline is a Potent and Selective Inhibitor of Human Vascular β -Type Platelet-Derived Growth Factor Receptor Tyrosine Kinase," J. Med. Chem. 37:2627-2629 (1994)	
	A88	Dong et al., "Activation of tumoricidal properties in macrophages by lipopolysaccharide requires protein-tyrosine kinase activity," Journal of Leukocyte Biology 53:53-60 (1993)	
	A89	Dong et al., "Protein Tyrosine Kinase Inhibitors Decrease Induction of Nitric Oxide Synthase Activity in Lipopolysaccharide-Responsive and Lipopolysaccharide-Nonresponsive Murine Macrophages," The Journal of Immunology 151(5):2717-2724 (1993)	
	A90	Dreborg et al., "Ch. 10 - The chemistry and standardization of allergens," in Handbook of Experimental Immunology - Volume 1: Immunochemistry, 4th Ed., edited by Weir et al., Blackwell Scientific Publications, Oxford, England, pp. 10.1 - 10.28 (1986)	
	A91	Engvall and Perlmann, "Enzyme-Linked Immunosorbent Assay, ELISA. III. Quantitation of Specific Antibodies by Enzyme-Labeled Anti-Immunoglobulin in Antigen-Coated Tubes," J. Immunology 109:129-135 (1972) (mistakenly referred to as Emgval)	
	A92	Faure et al., "A Member of the Ste20/PAK Family of Protein Kinases is Involved in Both Arrest of Xenopus Oocytes at G2/Prophase of the First Meiotic Cell Cycle and in prevention of Apoptosis," EMBO J. 16:5550-61 (1997)	
	A93	Felgner and Felgner, "Cationic Liposome-Mediated Transfection," Nature 337:387-388 (1989)	
	A94	Felgner et al., "Lipofection: A Highly Efficient, Lipid-mediated DNA-transfection Procedure," Proc. Natl. Acad. Sci. USA 84:7413-7417 (1987)	
	A95	Fernandes et al., "Biochemical and Antitumor Effects of 5,8-Dideazaisopteroylglutamate, a Unique Quinazoline Inhibitor of Thymidylate Synthase," Cancer Research 43:1117-1123 (1983)	
	A96	Ferris et al., "Synthesis of Quinazoline Nucleosides from Ribose and Anthranilonitrile. Application of Phase-Transfer Catalysis in Nucleoside Synthesis," J. Org. Chem. 44(2):173-178 (1979)	

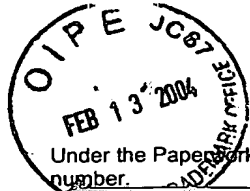
Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/725,121
				Filing Date	12/02/2003
				First Named Inventor	Gregory Plowman
				Group Art Unit	1652
				Examiner Name	Unassigned
Sheet	7	of	15	Attorney Docket Number	034536-0689

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ⁶
	A97	Frost et al., "Cross-Cascade Activation of ERKs and Ternary Complex Factors by Rho Family Proteins," EMBO J. 16:6426-6438 (1997)		
	A98	Frost et al., "Differential Effects of PAK1-activating Mutations Reveal Activity-dependent and -independent Effects on Cytoskeletal Regulation," J. Biol. Chem. 273:28191-28198 (1998)		
	A99	Fry et al., "A Specific Inhibitor of the Epidermal Growth Factor Receptor Tyrosine Kinase," Science 265:1093-1095 (1994)		
	A100	Galisteo et al., "The Adaptor Protein Nck Links Receptor Tyrosine Kinases with the Serine-Threonine Kinase Pak1," J. Biol. Chem. 271:20997-21000 (1996)		
	A101	Gazit et al., "Tyrophostins 1. Synthesis and Biological Activity of Protein Tyrosine Kinase Inhibitors," J. Med. Chem. 32:2344-2352 (1989)		
	A102	Gazit et al., "Tyrophostins. 3. Structure-Activity Relationship Studies of a α -Substituted Benzylidenemalononitrile 5-S-Aryltyrophostins," J. Med. Chem. 36:3556-3564 (1993)		
	A103	GenBank Accession Number AAD01210. serine/threonine kinase [homo sapiens]. Melnick MB. Publicly available January 5, 1999.		
	A104	Gerard et al., "cDNA Synthesis by Cloned Moloney Murine Leukemia Virus Reverse Transcriptase Lacking Rnase H Activity," Focus 11(4):66-69 (1989)		
	A105	Gilman et al., "Isolation of sigma-28-specific promoters from Bacillus subtilis DNA," Gene 32:11-20(1984)		
	A106	Glick and Whitney, "Factors affecting the expression of foreign proteins in Escherichia coli," Journal of Industrial Microbiology 1:277-282 (1987)		
	A107	Goding, "Conjugation of Antibodies with Fluorochromes: Modifications to the Standard Methods," J. Immunological Methods 13:215-226 (1976)		
	A108	Gold et al., "Translational Initiation in Prokaryotes." Ann. Rev. Microbiol. 35:365-403 (1981)		
	A109	Gottesman, "Bacterial Regulation: Global Regulatory Networks," Ann. Rev. Genet. 18:415-441 (1984)		
	A110	Gryczan, "Ch. 10 - Molecular Cloning in Bacillus subtilis," in The Molecular Biology of the Bacilli, edited by Dubnau, Academic Press, New York, pp. 307-329 (1982)		

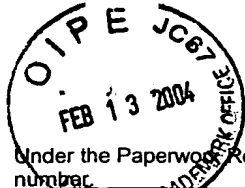
Examiner Signature		Date Considered	
---------------------------	--	------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 (use as many sheets as necessary)		Complete if Known	
		Application Number	10/725,121
Sheet	8	Filing Date	12/02/2003
	of	First Named Inventor	Gregory Plowman
	15	Group Art Unit	1652
		Examiner Name	Unassigned
		Attorney Docket Number	034536-0689

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A111	Hamer and Walling, "Regulation In Vivo of a Cloned Mammalian Gene: Cadmium Induces the Transcription of a Mouse Metallothionein Gene in SV40 Vectors," <u>J. of Molecular and Applied Genetics</u> 1:273-288 (1982) (also referred to as Hammer)	
	A112	Hammer et al., "Spontaneous Inflammatory Disease in Transgenic Rats Expressing HLA-B27 and Human β_2m : An Animal Model of HLA-B27-Associated Human Disorders," <u>Cell</u> 63:1099-1112(1990)	
	A113	Hirst et al., "Predicting Leucine Zipper Structures From Sequence," <u>Protein Engineering</u> 9:657-662 (1996)	
	A114	Houdebine and Chourrout, "Transgenesis in Fish," <u>Experientia</u> 47:891-897 (1991)	
	A115	Hu et al., "Human HPK1, a Novel Human Hematopoietic Progenitor Kinase that Activates the JNK/SAPK Kinase Cascade," <u>Genes and Dev.</u> 10:2251-2264 (1996)	
	A116	Hurby et al., in <u>Synthetic Peptides: A User's Guide</u> , edited by Grant, Washington University School of Medicine, W.H. Freeman and Company, New York, pp. 289-307 (1992)	
	A117	Hutchison M., "Isolation Of TAO1, A Protein Kinase That Activates MEKs In Stress-Activated Protein Kinase Cascades", <u>Journal Of Biological Chemistry</u> , US, American Society Of Biological Chemists, Baltimore, MD, Vol. 273, No. 44, Pages 28625-28632, 30 October 1998	
	A118	Innis et al., <u>PCR Protocols: A Guide to Methods and Applications</u> , edited by Michael A. Innis et al., Academic Press, San Diego (1990) (TABLE OF CONTENTS ONLY)	
	A119	Izaki, <u>Japanese Journal of Bacteriology</u> 33(6):729-742 (1978)	
	A120	Jackman et al., "ICI D1694, a Quinazoline Antifolate Thymidylate Synthase Inhibitor That Is a Potent Inhibitor of L1210 Tumor Cell Growth in Vitro and in Vivo: A New Agent for Clinical Study," <u>Cancer Research</u> 51:5579-5586 (1991)	
	A121	Jasny, "Insect Viruses Invade Biotechnology," <u>Science</u> 238:1653 (1987)	
	A122	John and Twitty, "Plasmids as Epidemiologic Markers in Nosocomial Gram-Negative Bacilli: Experience at a University and Review of the Literature," <u>Reviews of Infectious Diseases</u> 8:693-704 (1986)	
	A123	Johnston and Hopper, "Isolation of the yeast regulatory gene GAL4 and analysis of its dosage effects on the galactose/melibiose regulon," <u>Proc. Natl. Acad. Sci. USA</u> 79:6971-6975 (1982)	
	A124	Jones et al., "Quinazoline Antifolates Inhibiting Thymidylate Synthase: Variation of the Amino Acid," <u>J. Med. Chem.</u> 29:1114-1118(1986)	

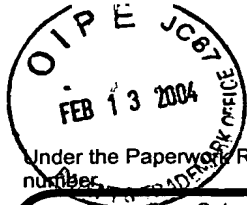
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: February 13, 2004

(use as many sheets as necessary)

Complete if Known

Application Number	10/725,121
Filing Date	12/02/2003
First Named Inventor	Gregory Plowman
Group Art Unit	1652
Examiner Name	Unassigned
Attorney Docket Number	034536-0689

Sheet 9 of 15

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A125	Joyner et al., "Production of a mutation in mouse En-2 gene by homologous recombination in embryonic stem cells," <u>Nature</u> 338:153-156 (1989)	
	A126	Kasprzak et al., "Location of a Contact Site Between Actin and Myosin in the Three-Dimensional Structure of the Acto-S1 Complex," <u>Biochemistry</u> 28:9230-9238 (1989)	
	A127	Kaur et al., "Tyrphostin induced growth inhibition: correlation with effect on p210 ^{bcr-abl} autokinase activity in K562 chronic myelogenous leukemia," <u>Anti-Cancer Drugs</u> 5:213-222 (1994)	
	A128	Kendall and Cohen, "Plasmid Transfer in Streptomyces lividans: Identification of a kil-kor System Associated with the Transfer Region of PIJ101," <u>Journal of Bacteriology</u> 169:4177-4183 (1987)	
	A129	Kiefer et al., "HPK1, a Hematopoietic Protein Kinase Activating the SAPK/JNK Pathway," <u>EMBO J.</u> 15:7013-7025 (1996)	
	A130	King et al., "Site-specific dephosphorylation and deactivation of the human insulin receptor tyrosine kinase by particulate and soluble phosphotyrosyl protein phosphatases," <u>Biochem. J.</u> 275:413-418 (1991)	
	A131	King et al., "The Protein Kinase Pak3 Positively Regulates Raf-1 Activity Through Phosphorylation of Serine 338," <u>Nature</u> 396:180-183 (1998)	
	A132	Knaus et al., "Regulation of Human Leukocyte p21-Activated Kinases Through G Protein-Coupled Receptors," <u>Science</u> 269:221-223 (1995)	
	A133	Knuutila et al., "DNA Copy Number Amplifications in Human Neoplasms: Review of Comparative Genomic Hybridization Studies," <u>Am. J. Pathol</u> 152:1107-1123(1998)	
	A134	Kohler and Milstein, "Continuous cultures of fused cells secreting antibody of predefined specificity," <u>Nature</u> 256:495-497 (1975)	
	A135	Kozak, "An analysis of 5'-noncoding sequences from 699 vertebrate messenger RNAs," <u>Nucleic Acids Research</u> 15:8125-8148 (1987)	
	A136	Kumar et al., "Novel Homologues of CSBP/p38 MAP Kinase: Activation, Substrate Specificity and Sensitivity to Inhibition by Pyridinyl Imidazoles," <u>Biochem. Biophys. Res. Commun.</u> 235:533-528 (1997)	
	A137	Kuo et al., "Effects of signalling transduction modulators on the transformed phenotypes in v-H-ras-transformed NIH 3T3 cells," <u>Cancer Letters</u> 74:197-202 (1993)	
	A138	Kuramochi et al., "LOK Is A Novel Mouse STE20-like Protein Kinase That Is Expressed Predominantly In Lymphocytes", The Journal Of Biological Chemistry, Vol. 272, No. 36, Pages 22679-22684, 5 September 1997	

Examiner
Signature

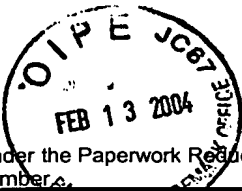
Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 (use as many sheets as necessary)		Complete if Known	
		Application Number	10/725,121
		Filing Date	12/02/2003
		First Named Inventor	Gregory Plowman
		Group Art Unit	1652
		Examiner Name	Unassigned
Sheet	10	of	15
		Attorney Docket Number	034536-0689

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A139	Lee and Skibo, "Active-Site-Directed Reductive Alkylation of Xanthine Oxidase by Imidazo[4,5-g]quinazoline-4,9-diones Functionalized with a Leaving Group," <u>Biochemistry</u> 26:7355-7362 (1987)	
	A140	Leeuw et al., "interaction of a G-protein β -subunit with a Conserved Sequence in Ste20/PAK Family Protein Kinases," <u>Nature</u> 391:191-195 (1998)	
	A141	Lemus et al., "Studies of Extended Quinone Methides. Synthesis and Physical Studies of Purine-like Monofunctional and Bifunctional Imidazo[4,5-g]quinazoline Reductive Alkylating Agents," <u>J. Org. Chem.</u> 54:3611-3618 (1989)	
	A142	Levitzi, "Tyrphostins: tyrosine kinase blockers as novel antiproliferative agents and dissectors of signal transduction," <u>FASEB J.</u> 6:3275-3282 (1992)	
	A143	Ley and Seng, "Synthesis Using Benzofuroxan," <u>Synthesis</u> 1975:415-422 (1975)	
	A144	Lu et al., "CDC42 and Rac1 are implicated in the Activation of the Nef-associated Kinase and Replication of HIV-1," <u>Current Biology</u> 6:1677-1684 (1996)	
	A145	Lui et al., "A Drosophila TNF-receptor-associated Factor (TRAF) Binds the Ste20 Kinase Misshapen and Activates Jun Kinase," <u>Curr. Biol.</u> 9:101-104 (1999)	
	A146	Lupas et al., "Predicting Coiled Coils from Protein Sequences," <u>Science</u> 252:1162-1164(1991)	
	A147	Lupas, "Prediction and Analysis of Coiled-Coil Structures," <u>Meth. Enzymology</u> 266:513-525 (1996)	
	A148	Lutz et al., "The Distribution of Two hnRNP-Associated Proteins Defined by a Monoclonal Antibody Is Altered in Heat-Shocked HeLa Cells," <u>Experimental Cell Research</u> 175:109-124 (1988)	
	A149	Lyall et al., "Tyrphostins Inhibit Epidermal Growth Factor (EGF)-Receptor Tyrosine Kinase Activity in Living Cells and EGF-stimulated Cell Proliferation," <u>J. Biol. Chem.</u> 264:14503-14509 (1989)	
	A150	Madaule et al., "A Novel Partner for the (FTP-bound Forms of rho and rac," <u>FEBS Letters</u> 377:243-238 (1995)	
	A151	MaGuire et al., "A New Series of PDGF Receptor Tyrosine Kinase Inhibitors: 3-Substituted Quinoline Derivatives," <u>J. Med. Chem.</u> 37:2129-2137 (1994)	
	A152	Maniatis, "Ch. 11 - Recombinant DNA Procedures in the Study of Eukaryotic Genes," in <u>Cell Biology: A Comprehensive Treatise, Volume 3. Gene Sequence Expression</u> , Academic Press, NY, pp. 563-608 (1980)	

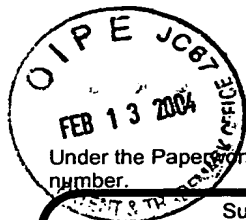
Examiner Signature		Date Considered	
---------------------------	--	------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: February 13, 2004

(use as many sheets as necessary)

Complete if Known

Application Number	10/725,121
Filing Date	12/02/2003
First Named Inventor	Gregory Plowman
Group Art Unit	1652
Examiner Name	Unassigned
Attorney Docket Number	034536-0689

Sheet 11 of 15

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A153	Manser et al., "A Brain Serine/Threonine Protein Kinase Activated by Cdc42 and Rac1," <u>Nature</u> 367:40-46 (1994)	
	A154	Manser et al., "PAK Kinases are Directly Coupled to the PIX Family of Nucleotide Exchange Factors," <u>Mol. Cell</u> 1:183-192 (1998)	
	A155	Mark et al., "Instability of Dinucleotide Repeats in Hodgkin's Disease," <u>Am. J. Hematol.</u> 57:148-152 (1998)	
	A156	Maxwell et al., " ¹⁹ F Nuclear Magnetic Resonance Imaging of Drug Distribution in Vivo: The Diposition of an Antifolate Anticancer Drug in Mice," <u>Magnetic Resonance in Medicine</u> 17:189-196 (1991)	
	A157	McKnight, "Functional Relationships between Transcriptional Control Signals of the Thymidine Kinase Gene of Herpes Simplex Virus," <u>Cell</u> 31:355-365 (1982)	
	A158	Miller et al., "An Insect Baculovirus Host-Vector System for High-Level Expression of Foreign Genes," in <u>Genetic Engineering: Principles and Methods</u> , edited by Setlow et al., Plenum Press, 8:277-298 (1986)	
	A159	Miller, "Human gene therapy comes of age," <u>Nature</u> 357:455-460 (1992)	
	A160	Mini et al., "Cytotoxic Effects of Folate Antagonists against Methotrexate-resistant Human Leukemic Lymphoblast CCRF-CEM Cell Lines," <u>Cancer Research</u> 45:325-330 (1985)	
	A161	Nelson et al., "Detection of Acridinium Esters by Chemiluminescence," <u>Nonisotopic DNA Probe Techniques</u> , ed. Larry J. Kricka, (San Diego: Academic Press, Inc.) pp. 275-310 (1992)	
	A162	Nikolic et al., "The p35/Cdk5 Kinase is a Neuron-Specific Rac Effector that Inhibits Paki Activity," <u>Nature</u> 395:194-198 (1998)	
	A163	Okayama and Berg, "A cDNA Cloning Vector That Permits Expression of cDNA Inserts in Mammalian Cells," <u>Molecular and Cellular Biology</u> 3:280-289(1983)	
	A164	Osada et al., "A Domain Containing the Cdc42/Rac Interactive Binding (CRIB) Region of p65 PAK Inhibits Transcriptional Activation and Cell Tranformation Mediated by the Ras-Rac Pathway," <u>FEBS Letters</u> 404:227-233 (1997).	
	A165	Peterson and Barnes, "Genistein and Biochanin A Inhibit the Growth of Human Prostate Cancer Cells but not Epidermal Growth Factor Receptor Tyrosine Autophosphorylation," <u>The Prostate</u> 22:335-345 (1993)	
	A166	Phillips and Castle, "Quino[1,2-c]quinazolines. I. Synthesis of Quino[1,2-c]quinazolinium Derivatives and the Related Indazolo[2,3-a]quinoline Derivatives as Analogs of the Antitumor Benzo[c]phenanthridine Alkaloids," <u>J. Heterocyclic Chemistry</u> 17:1489-1496 (1980)	

Examiner
Signature

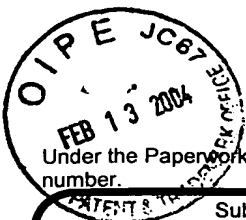
Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: February 13, 2004

(use as many sheets as necessary)

Complete if Known

Application Number	10/725,121
Filing Date	12/02/2003
First Named Inventor	Gregory Plowman
Group Art Unit	1652
Examiner Name	Unassigned
Attorney Docket Number	034536-0689

Sheet 12 of 15

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A167	Pillemer et al., "Insulin Dependence of Murine Lymphoid T-Cell Leukemia," <u>Brit. J. Cancer</u> 50:80-85 (1992)	
	A168	Pombo et al., "Activation of a Human Ste20-like Kinase by Oxidant Stress Defines a Novel Response Pathway," <u>EMBO J.</u> 17:4537-4546 (1996)	
	A169	Pombo et al., "Activation of the SAPK Pathway by the Human STE20 Homologue Germinal Centre Kinase," <u>Nature</u> 377:750-754 (1995)	
	A170	Pombo et al., "Activation of the Ste20-like Oxidant Stress Response Kinase-1 During the Initial Stages of Chemical Anoxia-induced Necrotic Cell Death," <u>J. Biol. Chem.</u> 272:29372-29379 (1997)	
	A171	Posner et al., "Kinetics of Inhibition by Tyrphostins of the Tyrosine Kinase Activity of the Epidermal Growth Factor Receptor and Analysis by a New Computer Program," <u>Molecular Pharmacology</u> 45:673-683 (1993)	
	A172	Pursel et al., "Genetic Engineering of Livestock," <u>Science</u> 244: 1281-1288 (1989)	
	A173	Qian et al., "Purification and Cloning of a Protein Kinase that Phosphorylates and Activates the Polo-Like Kinase Plx1," <u>Science</u> 282:1701-1704 (1998)	
	A174	Qian et al., "Dominant-negative Zeta-associated Protein 70 Inhibits T Cell Antigen Receptor Signaling," <u>J. Exp. Med.</u> 183:611-620 (1996)	
	A175	Reece et al., "Pharmacokinetics of Trimetrexate Administered by Five-Day Continuous Infusion to Patients with Advanced Cancer," <u>Cancer Research</u> 47:2996-2999 (1987)	
	A176	Ren et al., "In its Active Form, the GTP-Binding Protein rab8 Interacts with a Stress-Activated Protein Kinase," <u>Proc. Natl. Acad. Sci.</u> 93:5151-5155 (1996)	
	A177	Rendu et al., "Inhibition of Platelet Activation by Tyrosine Kinase Inhibitors," <u>Biochemical Pharmacology</u> 44(5):881-888 (1992)	
	A178	Robertson, <u>Teratocarcinomas and embryonic stem cells: a practical approach</u> , IRL Press (1987) (TABLE OF CONTENTS)	
	A179	Roe et al., "TOUSLED Is a Nuclear Serine/Threonine Protein Kinase that Requires a Coiled-coil Region for Oligomerization and Catalytic Activity," <u>J. Biol. Chem.</u> 272:5838-5845 (1997)	
	A180	Rubin, "Drosophila melanogaster as an Experimental Organism," <u>Science</u> 240:1453-1459 (1988)	
	A181	Rudel and Bokoch, "Membrane and Morphological Changes in Apoptotic Cells Regulated by Caspase-Mediated Activation of Pak2," <u>Science</u> 276:1571-4 (1997)	

Examiner
Signature

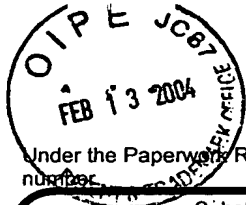
Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: February 13, 2004

(use as many sheets as necessary)

Complete if Known

Application Number	10/725,121
Filing Date	12/02/2003
First Named Inventor	Gregory Plowman
Group Art Unit	1652
Examiner Name	Unassigned
Attorney Docket Number	034536-0689

Sheet 13 of 15

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A182	Sambrook, Maniatis and Fritsch, <u>Molecular Cloning: A Laboratory Manual</u> , 2 nd Edition, Cold Spring Harbor Laboratory Press (1989) (TABLE OF CONTENTS - ALL THREE VOLUMES)	
	A183	Sauro and Thomas, "Decreased Sensitivity of Aorta from Hypertensive Rats to Vasorelaxation by Tyrphostin," <u>Life Sciences</u> 53:PL371-376 (1993)	
	A184	Sauro and Thomas, "Tyrphostin Attenuates Platelet-Derived Growth Factor-Induced Contraction in Aortic Smooth Muscle Through Inhibition of Protein Tyrosine Kinase(s)," <u>The Journal of Pharmacology and Experimental Therapeutics</u> 267:1119-1125 (1993)	
	A185	Schinkmann and Blenis, "Cloning and Characterization of a Human STE20-like Protein Kinase with Unusual Cofactor Requirements," <u>J. Biol. Chem.</u> 272:28695-28703 (1997)	
	A186	Schlesinger et al., "The Tao of MEKK," <u>Frontiers in Bioscience</u> 3:D1181-6 (1998)	
	A187	Sculier et al., "Role of an Intensive Care Unit (ICU) in a Medical Oncology Department," <u>Cancer Immunol. and Immunotherapy</u> 23:A65 at abstract no. 257 (1986)	
	A188	Shi and Kehrl, "Activation of Stress-activated Protein Kinase/c-Jun N-terminal Kinase, but Not NF- κ B, by the Tumor Necrosis Factor (TNF) Receptor 1 Through a TNF Receptor-associated Factor 2- and Germinal Center Kinase Related-dependent Pathway," <u>J. Biol. Chem.</u> 272:32102-32107 (1997)	
	A189	Sikora and Grzelakowska-Sztabert, "Quinazoline CB 3717 and CB 3703 Inhibitors of Folate Retention and Metabolism in Ehrlich Ascites Carcinoma Cells and Some Organs of the Host-Mouse," <u>Cancer Letters</u> 23:289-295 (1984)	
	A190	Sikora et al., "Development of an Assay for the Estimation of N ¹⁰ -Propargyl-5,8-dideazafolic Acid Polyglutamates in Tumor Cells," <u>Analytical Biochemistry</u> 172:344-355 (1988)	
	A191	Silver et al., "Amino terminus of the yeast GAL4 gene product is sufficient for nuclear localization," <u>Proc. Natl. Acad. Sci. USA</u> 81:5951-5955 (1984)	
	A192	Simons et al., "Gene Transfer into Sheep," <u>Bio/Technology</u> 6:179-182 (1988) (also referred to as Simms or Simmons)	
	A193	Smith and Waterman, "Identification of Common Molecular Subsequences," <u>J. Mol. Biol.</u> 147:195-197 (1981)	
	A194	St. Groth and Scheidegger, "Production of Monoclonal Antibodies: Strategy and Tactics," <u>J. Immunol. Methods</u> 35:1-21 (1980)	
	A195	Stemberger et al., "The Unlabeled Antibody Enzyme Method of Immunohistochemistry: Preparation and Properties of Soluble Antigen-Antibody Complex (Horseradish Peroxidase-Antihorseradish Peroxidase) and its Use in Identification of Spirochetes," <u>J. Histochemistry and Cytochemistry</u> 18(5):315-333 (1970)	

Examiner
Signature

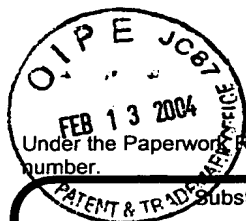
Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PATENT & TRADEMARK OFFICE Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 (use as many sheets as necessary)		Complete if Known <table border="1"> <tr> <td>Application Number</td> <td>10/725,121</td> </tr> <tr> <td>Filing Date</td> <td>12/02/2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Gregory Plowman</td> </tr> <tr> <td>Group Art Unit</td> <td>1652</td> </tr> <tr> <td>Examiner Name</td> <td>Unassigned</td> </tr> <tr> <td>Attorney Docket Number</td> <td>034536-0689</td> </tr> </table>		Application Number	10/725,121	Filing Date	12/02/2003	First Named Inventor	Gregory Plowman	Group Art Unit	1652	Examiner Name	Unassigned	Attorney Docket Number	034536-0689
Application Number	10/725,121														
Filing Date	12/02/2003														
First Named Inventor	Gregory Plowman														
Group Art Unit	1652														
Examiner Name	Unassigned														
Attorney Docket Number	034536-0689														
Sheet	14	of	15												

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A196	Su et al., "NIK Is A New Ste20-Related Kinase That Binds NCK and MEKK1 and Activates The SAPK/JNK Cascade Via A Conserved Regulatory Domain", The EMBO Journal, Vol. 16, No. 6, Pages 1279-1290, 1997	
	A197	Su et al., "The Drosophila Ste20-related Kinase Misshapen is Required for Embryonic Dorsal Closure and Acts Through a JNK MAPK Module on an Evolutionarily Conserved Signaling Pathway," <u>Genes Dev.</u> 12:2371-2380 (1998)	
	A198	Su et al., "NIK is a New Ste20-related Kinase that Binds NCK and MEKK1 and Activates the SAPK/JNK Cascade via a Conserved Regulatory Domain," <u>EMBO J.</u> 16:1279-1290 (1997)	
	A199	Sudol, "Structure and Function of the WW Domain," <u>Prog. Biochys. Mol. Bio.</u> 65:113-132 (1996)	
	A200	Swanek et al., "Jun N-Terminal Kinase/Stress-Activated Protein Kinase (JNK/SAPK) Is Required for Lipopolysaccharide Stimulation of Tumor Necrosis Factor Alpha (TNF- α) Translation: Glucocorticoids Inhibit TNF- α Translation by Blocking JNK/SAPK," <u>Mol. Cell. Biol.</u> 6274-6282 (1997)	
	A201	Szczepanowska et al., "Identification by Mass Spectrometry of the Phosphorylated Residue Responsible for Activation of the Catalytic Domain of Myosin I Heavy Chain Kinase, A Member of the PAK/STE20 Family," <u>Proc. Natl. Acad. Sci.</u> 94:8503-8508 (1997)	
	A202	Tang et al., "Kinase-Deficient Pak1 Mutants Inhibit Ras Transformation of Rat-1 Fibroblasts," <u>Mol. Cell. Biol.</u> 17:4454-4464 (1997)	
	A203	Tijssen, <u>Practice and Theory of Enzyme Immunoassays: Laboratory Techniques in Biochemistry and Molecular Biology</u> , Volume 15, Elsevier Science Publishers, Amsterdam, The Netherlands (1985) (TABLE OF CONTENTS ONLY)	
	A204	Treisman et al., "Misshapen Encodes a Protein Kinase Involved in Cell Shape Control in Drosophila," <u>Gene</u> 186:119-125 (1997)	
	A205	Ullmanen et al., "Transcription and Translation of Foreign Genes in Bacillus subtilis by the Aid of a Secretion Vector," <u>Journal of Bacteriology</u> 162:176-182 (1985)	
	A206	VanArsdale and Ware, "TNF Receptor Signal Transduction," <u>J. Immunol.</u> 153:3043-3050 (1994)	
	A207	Wang et al., "Activation of the Hematopoietic Progenitor Kinase-1 (HPK1)-dependent, Stress-activated c-Jun N-terminal Kinase (JNK) Pathway by Transforming Growth Factor β (TGF- β)-activated Kinase (TAK1), a Kinase Mediator of TGF β Signal Transduction," <u>J. Biol. Chem.</u> 272:22771-22775 (1997)	
	A208	Ward et al., "Construction and characterisation of a series of multi-copy promoter-probe plasmid vectors for Streptomyces using the aminoglycoside phosphotransferase gene from Tn5 as indicator," <u>Mol. Gen. Genet.</u> 203:468-478 (1986)	
	A209	Wilchek and Jakoby, "The Literature on Affinity Chromatography," <u>Methods in Enzymology</u> 34:3-10 (1974) (also referred to as Jacoby)	

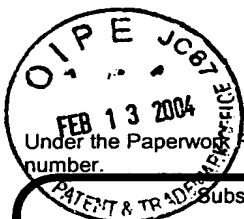
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.



MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: February 13, 2004 <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/725,121
		Filing Date	12/02/2003
		First Named Inventor	Gregory Plowman
		Group Art Unit	1652
		Examiner Name	Unassigned
Sheet	15	of	15
		Attorney Docket Number	034536-0689

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A210	Wolbring et al., "Inhibition of GTP-utilizing Enzymes by Typhostins," <u>J. Biol. Chem.</u> 269:22470-22472 (1994)	
	A211	Wu et al., "Molecular Characterization of Ste20p, a Potential Mitogea-activated protein or Extracellular Signal-regulated Kinase Kinase (MEK)Kinase Kinase from Saccharomyces cerevisiae," <u>J. Biol. Chem.</u> 270:15984-15992 (1995)	
	A212	Xu et al., "Three-dimensional Structure of the Tyrosine Kinase c-Src," <u>Nature</u> 385:595-602 (1997)	
	A213	Yablonski et al., "A Nck-Pak1 Signaling Module is Required for T-cell Receptor-mediated Activation of NFAT, but not of JNK," <u>EMBO J.</u> 17:5647-5657 (1998)	
	A214	Yan et al., "Activation of Stress-activated Protein Kinase by MEKK1 Phosphorylation of its Activator SEK1," <u>Nature</u> 372:798-800(1994)	
	A215	Yanagisawa et al., "A Novel Serine/Threonine Kinase Gene, Gek 1, Is Expressed in Meiotic Testicular Germ Cells and Primordial Germ Cells," <u>Mol. Reprod. and Dev.</u> 45:411-420 (1996)	
	A216	Yang et al., "In Vivo and In Vitro Gene Transfer to Mammalian Somatic Cells by Particle Bombardment," <u>Proc. Natl. Acad. Sci. USA</u> 87:9568-9572 (1990)	
	A217	Yao et al., "A Novel Human STE20-Related Protein Kinase, HGK, That Specifically Activates the c-Jun N-terminal Kinase Signaling Pathway," <u>J. Biol. Chem.</u> 274:2118-25(1999)	
	A218	Yoneda et al., "The Antiproliferative Effects of Tyrosine Kinase Inhibitors Typhostins on a Human Squamous Cell Carcinoma in Vitro and in Nude Mice," <u>Cancer Research</u> 51:4430-4435 (1991)	
	A219	Yuan. "Transducing Signals of Life and Death," <u>Curr. Opinion in Cell. Biol.</u> 9:247-251 (1997)	
	A220	Zhang et al., "Rho Family GTPases Regulate p38 Mitogen-activated Protein Kinase Through the Downstream Mediator Pak1," <u>J. Biol. Chem.</u> 270:23934-23936 (1995)	
	A221	Zhu and Hedgecock, "Mig- 15 Encodes a Novel Ser/Thr Protein Kinase of the Ste-20/p65PAK Family," <u>Worm Breeder's Gazette</u> 14:76 (1997)	

Examiner Signature		Date Considered	
---------------------------	--	------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.